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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,604	08/26/2003	Jiawen Dong	126750-1	4284

23413 7590 01/20/2006

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EXAMINER
BOYKIN, TERRESSA M

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/648,604	DONG ET AL.	
	Examiner	Art Unit	
	Terressa M. Boykin	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9-6-05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

Applicant's arguments with respect to claims 1, 3-29 have been considered but are moot in view of the new ground(s) of rejection.

35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3- 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 6,015,512 see abstract, cols. 1-8 and claims.

With regard to claims 1-16 the reference discloses a polymeric material prepared from the same components as claimed by applicants except for the particular polyarylene ether blend to be filtered. However, **USP 6,015,512** relates to making optical articles such as ophthalmic lenses by molding and, in particular, to using a continuous extrusion-compression molding method to make plastic lenses whereby a ***polymer melt*** is fed from an extruder or melting apparatus to a series of sequentially processed compression molds, the lenses formed by compressing the molds, the lenses separated from the molds and the molds recycled to the melt feed step of the process.

The extruder is preferred to have one to five feeding ports and one to five venting

ports. The temperature and screw speed of the extruder are set at the normal operation range of the parameters for the material extrusion process in order to produce a melt with a viscosity generally in the range of 1,000 to 300,000 cps or more depending upon the material. *A screen changer is typically installed on the extruder* ***for filtering the melt.*** The melt is extruded to minimize air bubbles, voids or visible inclusions in the extruded melt. The filter of a melt to purify it from impurities, occlusions, particles, bubbles etc. to vastly known in the art. It is of no patentable ingenuity to filter a polymer melt.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the polymer blend since the filtering of melts is a commonly known and practiced in the art.

The reference discloses also does not specify that the residence time should be less than 5 minutes or less.

However, it would have also been obvious to employ a short residence time, 5 minutes or less since it is also *widely known* by all skilled artisans in the art that *it necessary to reduce the residence time* of a melt at high temperatures since *degradation is a function not only of temperature but also of time*. Thus, if the temperature is high, it is preferred that the *residence time be minimized.* The specific residence time of 5 minutes has not been disclosed as a having an unobvious result other than what would be expected in the art.

Consequently, the claimed invention cannot be deemed as unobviousness and

accordingly is unpatentable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

. **Claims 1, 3-19 are rejected under 35 U.S.C. 102(a, b, or e) as being anticipated by USP 3457343 see abstract, cols. 1-3;, JP 63256427 see abstract; JP 63091231 see abstract .**

. **USP 3457343** discloses a process for the wet spinning of threads form poly 2,6, disubstituted paraphenylene ethers comprising extruding a solution of said ether in an aliphatic halohydrocarbon into a coagulation bath.

JP 63256427 discloses a resin composition is the mixture of the polymer having the unit of aromatic vinyl monomer as its main part and polyphenylene ether, or the block copolymer, graft copolymer or their mixture composed of the polymer having the unit of aromatic vinyl monomer as its main part and polyphenylene ether component. To remove the foreign fine particles with 1μm diameter or more from this solution mixed at dissolved state, the solution is preliminarily filtered. A screw extruding pelletizer has at least one vent port or more to

remove the solvent, and the pressure of the vent port is reduced to 500 Hg or lower. As the forming temperature, the temperature is at least the glass transition temperature of the resin to about 350 C.

JP 63091231 discloses an optical element superior in optical isotropy, heat resistance and mechanical properties, by making the number of particulates of a foreign matter of 1μm or larger in resin into 10,000 pieces/g or less. A resin composition composed of a polymer part mainly composed of an aromatic vinyl monomer and a polyphenylene ether part is dissolved into an organic solvent. Then after particulates of a foreign matter of 1μm or larger in the said resin have been made into 10,000 pieces/g or less by either recovering the same through filtration or passing the said resin through a sintered metallic filter after the resin has been molten, optical elements such as an optical card, lens, prism and optical disk base are manufactured by fusing and molding the same. An optical disk superior in heat resistance and possessing a sufficiently high C/N ratio at the time of reproduction of a record can be manufactured.

Each of the references discloses a method of purifying a polymeric material prepared from the same components as claimed by applicants. Note applicant(s) "comprising" is open language and does not exclude those additional moieties etc. disclosed herein. Since the disclosed “residence time” is expressed differently and thus may be distinct from those claimed, it is incumbent upon applicant(s) to establish that

they are in fact different and whether such difference is unobvious. In view of the above, there appears to be no significant difference between the reference(s) and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

Correspondence

Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at http://www.uspto.gov/ebc/index.html or 1-866-217-9197.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is **(571-272-1700).**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tmb

Examiner Terressa Boykin

also 10/648640, 609, 647 for ODP

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-29 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-45 of copending Application No. **10648609; and** claim 1 of copending Application No. **10648640;** claims 1-12 of copending Application No. **10648647**. Although the conflicting claims are not identical, they are not patentably distinct from each other

because the substrate layer used on the storage media is defined as the polymeric material as purified in the enabling disclosure.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3-29 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3-49 of copending Application No. **10922194**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the claims are fully encompassed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Correspondence

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tmb

Examiner Terressa Boykin

Primary Examiner

Art Unit 1711

TERRESSA M. BOYKIN
PRIMARY EXAMINER